Resource Summary Report

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RELION

RRID:SCR_016274
Type: Tool

Proper Citation

RELION (RRID:SCR_016274)

Resource Information

URL: http://www2.mrc-lmb.cam.ac.uk/relion

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Description: Software for determination of cryo-EM structures. It employs an empirical Bayesian approach to refinement of (multiple) 3D reconstructions or 2D class averages in electron cryo-microscopy.

Synonyms: RELION, REgularised LIkelihood OptimisatioN, RELION-3

Resource Type: data analysis software, data processing software, software application, software resource, standalone software

Defining Citation: PMID:23000701

Keywords: cryo, cryogenic, cryo em, determination, analysis, bayesian, statistic, map, maximum a posteriori, electron, cryomicroscopy

Funding: UK Medical Research Council

Availability: Free, Available for download, Tutorial available

Resource Name: RELION

Resource ID: SCR_016274

Alternate IDs: OMICS_15597

Alternate URLs: https://sources.debian.org/src/relion-bin+mpi+gui/

License: GPLv2 License

Record Creation Time: 20220129T080329+0000

Record Last Update: 20260919T195320+0000

Ratings and Alerts

No rating or validation information has been found for RELION.

No alerts have been found for RELION.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 440 mentions in open access literature.

Listed below are recent publications. The full list is available at nidm-terms .

Chung I, et al. (2026) Post-catalysis structures of mitochondrial complex I with ubiquinol-10 bound in the active site. Nature communications, 17(1).

Ji SY, et al. (2026) Dynamic monomer-dimer transition in ligand-induced apelin receptor activation. Nature communications, 17(1).

Burton-Smith RN, et al. (2026) The 4.4 Å Capsid Structure of the Giant Melbournevirus Belonging to the Marseilleviridae Family. Viruses, 18(4).

Dong YJ, et al. (2026) Structured water molecules drive activation and G protein selectivity in the GPR174 receptor. PLoS biology, 24(5), e3003447.

Singh K, et al. (2026) Structural basis for recognition of diverse localizing mRNAs by Egl-BicD. Nature structural & molecular biology, 33(5), 882.

Song M, et al. (2026) The molecular fidelity of A? pathology in 5xFAD and AppNL-FPsen1P117L mice revealed by cryo-EM. Molecular neurodegeneration, 21(1), 10.

Nguyen BA, et al. (2026) Cryo-EM reveals structural variability of apolipoprotein A-I amyloid fibrils across organs, mutations, and clinical presentations. Nature communications, 17(1).

Padmanaban S, et al. (2026) Cryo-EM reveals the structural heterogeneity and conformational flexibility of multidrug efflux pumps MdtB and MdtF. mBio, 17(1), e0268425.

Kasai K, et al. (2026) Structural Mechanism of Receptor-Triggered MyD88 Oligomeric Assembly in Innate Immune Signaling. Nature communications, 17(1).

Ehses K, et al. (2026) Structural remodeling of the mitochondrial protein biogenesis machinery under proteostatic stress. Science advances, 12(10), eaed3579.

Pinto CS, et al. (2026) Actin arginylation alters myosin engagement and F-actin patterning despite structural conservation. The Journal of cell biology, 225(1).

Mueller AU, et al. (2026) Structural basis for multi-subunit DNA-dependent RNA polymerase catalytic activity. Molecular cell, 86(10), 1881.

Clemens DL, et al. (2026) Discovery and cryoEM structure of FPM13, a periplasmic metalloprotein unique to Francisella. PLoS pathogens, 22(3), e1014024.

Geohring IC, et al. (2026) A nucleotide code governs Lis1's ability to relieve dynein autoinhibition. Nature chemical biology, 22(4), 649.

Devenish SO, et al. (2026) Next-generation chemogenetic inhibition using a brain-permeant non-prescription agent. Signal transduction and targeted therapy, 11(1).

Liu C, et al. (2026) Inhibition of HER2 signaling and breast cancer cell growth with a novel antibody targeting HER2 ECD III/IV. PloS one, 21(1), e0338127.

Powell AE, et al. (2026) A stabilized MERS-CoV spike ferritin nanoparticle vaccine elicits robust and protective neutralizing antibody responses. Nature communications, 17(1), 1750.

Serianni VM, et al. (2026) Molecular insight into 5' RNA capping with NpnNs by bacterial RNA polymerase. Nature chemical biology, 22(6), 917.

Vijayakrishnan S, et al. (2026) Molecular architecture of Influenza A virions. bioRxiv : the preprint server for biology.

Ricaña CL, et al. (2026) Lenacapavir prevents production of infectious HIV-1 by abrogating immature virus assembly. bioRxiv : the preprint server for biology.